



SEQUENCE LISTING

<110> Garnaat, Carl W.
Roth, Bradley A.

<120> ZmAxigl Polynucleotides and Methods of
Use

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<141> 2001-07-13

<150> US 60/217,942

<151> 2000-07-13

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acgcacatga ccgcagtgcg cgcggggctg atcaagggaa agtgatcgg atg gag ctg 178
Met Glu Leu

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gag ctc ggg ctc gcg ccg ccg aac ccg cat cag ccg ctg gct gcc gcc 226
Glu Leu Gly Leu Ala Pro Pro Asn Pro His Gln Pro Leu Ala Ala Ala
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gcc gag ttc gtc ggt ctc ctc agc agc tcg gct ggc tcg tgc ggg aac 274
Ala Glu Phe Val Gly Leu Leu Ser Ser Ser Ala Gly Ser Cys Gly Asn
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aag agg gtt ctc ggc gac gcg ttc ggg gcc gcc aag gcg gcc acg ctt 322
Lys Arg Val Leu Gly Asp Ala Phe Gly Ala Ala Lys Ala Ala Thr Leu
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Pro Leu Phe Val Cys Glu Asp Gly Asp Gly Gly Gly Gly Asp Arg Asp
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Arg Asp Gly Val Val Asp His Glu Gln Gln Ser Asn Asn Val Pro Arg
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 Ser Cys Gly Gly Gly Tyr Val Lys Val Lys Leu Glu Gly Val Pro Ile
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 Gly Arg Lys Val Asp Val Ser Ile His Gly Ser Tyr Gln Glu Leu Leu
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 Arg Thr Leu Glu Ser Met Phe Pro Ser Gly Asn Gln Gln Asp His Ala
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gaa gac gag gtg gtg gtc tgc cac gag cgc cgc cgt cgc cat cct tat 658
 Glu Asp Glu Val Val Val Ser His Glu Arg Arg Arg Arg His Pro Tyr
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gta gtc acc tac gag gac ggc gaa ggg gac tgg ttg ctc gtc gga gat 706
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 165 170 175

gat gtg ccg tgg gag gtc ttt gtc aag tca gtg aag cgg ctc aag ata 754
 Asp Val Pro Trp Glu Val Phe Val Lys Ser Val Lys Arg Leu Lys Ile
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 Ala Thr Leu Pro Leu Phe Val Cys Glu Asp Gly Asp Gly Gly Gly Gly
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 85 90 95
 Arg Arg Arg Ser Cys Gly Gly Gly Tyr Val Lys Val Lys Leu Glu Gly
 100 105 110
 Val Pro Ile Gly Arg Lys Val Asp Val Ser Ile His Gly Ser Tyr Gln
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 Glu Leu Leu Arg Thr Leu Glu Ser Met Phe Pro Ser Gly Asn Gln Gln
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 Asp His Ala Glu Asp Glu Val Val Val Ser His Glu Arg Arg Arg Arg
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 His Pro Tyr Val Val Thr Tyr Glu Asp Gly Glu Gly Asp Trp Leu Leu
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tgctcaagtc	ccgcgggcca	gtctccggag	ccgccatgct	accgcaccac	caccaccacc	600
acgacatgca	gatgcacgcc	gccatgtacg	ggggaacggc	cgtgcccccg	ccggccgggc	660
ctcctcacca	cggcggggttc	ctcatgccac	acccacagg	tagtagccac	tacctgcctt	720
acggtacga	gcccacgtac	ggcggtgagc	acgccatggc	tgcatactat	ggaggcgccg	780
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gcagtcgtag	aagtgttcaa	tgcttgccag	tgtgtgtgtt	tagggccggg	gtaaacccatc	1140
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<210> 19
 <211> 763
 <212> DNA
 <213> Zea mays

<400> 19						
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ggcggtgaag	agcgcgggcg	ccctgcagg	cgtggtggct	cgcgcggcg	ctcgctcgctc	180
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caccagagcg	tgtcgcttgc	tgaggatac	gccgtccggc	ccgttccccg	cccgatgcca	300
gcccgtgggt	accgcacgca	ggcgggagac	caccgcagcg	tggcgggcg	ggctccctgc	360
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<210> 20
 <211> 622

<212> DNA

<213> Zea mays

<220>

<221> misc_feature

<222> (1)...(622)

<223> n = a, t, c, or g

<400> 20

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ccaaagaagc agtggcgacc gacgaagcac cgccgccaat gggcaacaac aacaacacgg 120
aatcgcgacg ggcgacgatg gtccgggagc aggaccggct gatgcccggt gccaacgtgt 180
cccgcacatc gcgccaagtg ctgcctccgt acgccaagat ctccgacgac gcccangaag 240
tnatccaaga attgctnttc ggaatttcat cacttncgtc ctggcgaggc gaaacgaagc 300
ggtgccacac cgagcgccgc aagaccgtca cctccgaaga catcgtgtgg gccatgagcc 360
gcctcggctt cgacgactac gtgcgcgccc tcggcgccct cctccagcgc atgcgcgacn 420
acagcgaaca cggggggtgaa aacgcggcgg cctgcanggg gtngtggtcn cgccgcgggt 480
cgtctncttg gcgctccctt gccgcaanag atgacaactt gcaccaaacg tctgcccggg 540
tcggaccaa actnttcctt gttgcaggaa taccgcgtcn gggccnttcc ccccnnaatc 600
caaccatttg gtttcccctt gc                                     622
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<210> 21

<211> 65

<212> PRT

<213> Zea mays

<220>

<221> VARIANT

<222> (1)...(65)

<223> Xaa = any amino acid

<400> 21

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 1              5              10              15
Arg Xaa Xaa Leu Pro Xaa His Ala Lys Ile Ser Asp Asp Ala Lys Glu
      20              25              30
Xaa Ile Gln Glu Cys Val Ser Glu Tyr Ile Ser Phe Xaa Thr Xaa Glu
      35              40              45
Ala Asn Xaa Arg Cys Xaa Xaa Xaa Xaa Arg Lys Thr Xaa Xaa Xaa Glu
      50              55              60
Xaa
65
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<210> 22

<211> 1309

<212> DNA

<213> Zea mays

<400> 22

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tgtacggcta catcgaacat atacacgaga tgtctcgtgt gaatagagtc actaatgcct 180
taagcatcgg ttactccgta gggtagattc tggtcttctt atttgtgcat atttttattg 240
ttgtttactg attatagag tagttataca tacatgcaca tacatatcat cacatatatc 300
acaatatatt tctaaattaa attaaaacta aaaatgacta aatttctaac accaacgaca 360
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ttgtaatgtt	ttctccaaca	actttaccta	ttctacattg	ttctattttcg	aattttcactc	420
tataaacaac	atagtctaca	atggaaaaca	gtgctttgta	cgactatata	cgcgatgtgt	480
ggctacaaca	taagacaata	tagtcgtttg	aagattgaac	ctatatatcg	gtacgggttaa	540
tccgtctatg	tacgtgggca	tgacgaacac	ccgtgataac	gaaggattaa	cgtgcacaat	600
cataaatcca	aagtaggagc	ggtgcatgat	gagaatcgct	ctcagtactc	gacataatga	660
accttacgag	gtacaacagg	caggcaggca	gggaccagg	gccgccttta	tttcaggctc	720
gctggcccca	cgggcgtgct	gcgtgcacga	agggcactac	cccaacctct	caccgaaaac	780
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tcgttatcga	tcgatcgatc	gcgtcactca	cgggtagctc	atggtcgagc	gtagcatgca	1140
ggaacttatt	tgccgtgcgc	tcccaggctc	ccgctcgcgt	gccttcagct	ctgtctcaca	1200
ctagctgctg	tgggacgatc	gaagtgggtg	tgtcagctag	ctagctgcgc	cgtgaccacg	1260
cacatgaccg	cagtgcgcgc	ggggctgac	aagggaagt	gatcggatg		1309

<210> 23
 <211> 664
 <212> DNA
 <213> Zea mays

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cgctcggcaa	cgaggcggcc	cgcgctgctg	agtcccctgg	acacccgaca	ccctgtcggc	360
cctttgttta	ttcatcccga	aatctcatct	gccccacgg	ccgactgcgc	tgccgcgcc	420
ggatatatat	acccatcggt	atcgatcgat	cgatcgcgtc	actcacgggt	agctcatggt	480
cgagcgtagc	atgcaggaac	ttatttgccg	tgcgtcccca	ggtctccgct	cgcgtgcctt	540
ccagtctgtc	tcacactagc	tgctgtggga	cgatcgaagt	gggtgtgtca	gctagctagc	600
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gatg						664

<210> 24
 <211> 664
 <212> DNA
 <213> Zea mays

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cctttgttta	ttcatcccga	aatctcatct	gccccacgg	ccgactgcgc	tgccgcgcc	420
ggatatatat	acccatcggt	atcgatcgat	cgatcgcgtc	actcacgggt	agctcatggt	480
cgagcgtagc	atgcaggaac	ttatttgccg	tgcgtcccca	ggtctccgct	cgcgtgcctt	540
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catg						664

<210> 25

<211> 663
 <212> DNA
 <213> Zea mays

<400> 25
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 ctctcaccga aaaccgcgct ggatcggcaa atcaaaccgag gtggtgcccc gtgcccactc 180
 tccacgtcca cggcaccatc cctctgcagc cgctcaccag ccatgccgtg tcgcggaacg 240
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 gctcggcaac gaggcggccc gcgctgctga gtcccctgga caccgacac cctgtcggcc 360
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 gatatatata cccatcggtta tcgatcgatc gatcgcgtca ctacgggta gctcatggtc 480
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 atg 663

<210> 26
 <211> 663
 <212> DNA
 <213> Zea mays

<400> 26
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 tccacgtcca cggcaccatc cctctgcagc cgctcaccag ccatgccgtg tcgcggaacg 240
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